

In the Claims

Claims 1 – 10 (Cancelled)

11. (Currently Amended) An improved cathode substrate for a field emission display, comprising:

a substrate;

a cap layer disposed on said substrate;

an anti-reflective coating, with the anti-reflective coating being included within the cap layer and across an expanse of the cap layer to prevent reflection of light within the field emission display; and

an array of emitter tips formed on said cap layer with the anti-reflective coating within it.

12. (Original) An improved cathode substrate according to claim 11 wherein said substrate is a soda-lime glass.

13. (Original) An improved cathode substrate according to claim 11 wherein said cap layer is deposited on said substrate by plasma enhanced, chemical vapor deposition.

14. (Original) An improved cathode substrate according to claim 11 wherein said cap layer has a thickness in the range of 0.1 to 0.5 microns.

15. (Original) An improved cathode substrate according to claim 11 wherein said cap layer is selected from the group consisting of silicon dioxide, silicon nitride, silicon carbide, and diamond-like carbon.

16. (Original) An improved cathode substrate according to claim 11 wherein said substrate is plastics material.

17. (Original) An improved cathode substrate according to claim 11 wherein said substrate is a non-conductive material.

18. (Original) An improved cathode substrate according to claim 11 wherein said substrate is leached prior to deposition of said cap layer.

19. (Cancelled)

20. (Cancelled)

21. (Currently Amended) An improved cathode substrate for a field emission display formed by the steps of:

providing a substrate;

depositing a cap layer with an anti-reflective coating within it on the substrate, with the anti-reflective coating extending across an expanse of the cap layer; and

forming an array of emitter tips on the cap layer with the antireflective coating within it.

22. (Original) An improved cathode substrate according to claim 21 wherein said substrate is a soda-lime glass.

23. (Original) An improved cathode substrate according to claim 21 wherein said cap layer is deposited on said substrate by plasma enhanced, chemical vapor deposition.

24. (Original) An improved cathode substrate according to claim 21 wherein said cap layer has a thickness in the range of 0.1 to 0.5 microns.

25. (Original) An improved cathode substrate according to claim 21 wherein said cap layer is selected from the group consisting of silicon dioxide, silicon nitride, silicon carbide, and diamond-like carbon.

26. (Original) An improved cathode substrate according to claim 21 wherein said substrate is formed of a plastics material.

27. (Original) An improved cathode substrate according to claim 21 wherein said substrate is formed of a non-conductive material.

28. (Original) An improved cathode substrate according to claim 21 wherein said substrate is leached prior to deposition of said cap layer.

29. (Cancelled)

30. (Cancelled)

31. (Currently Amended) An improved cathode substrate for a field emission display, comprising:

a substrate;

a cap layer disposed on said substrate;

a light blocking layer, with the light blocking layer being included within the cap layer and across an expanse of the cap layer to absorb light incident thereon from within the field emission display; and

an array of emitter tips formed on said cap layer with the light blocking layer.

32. (Previously Added) An improved cathode substrate according to claim 31, wherein said substrate is a soda-lime glass.

33. (Previously Added) An improved cathode substrate according to claim 31, wherein said cap layer is deposited on said substrate by plasma enhanced, chemical vapor deposition.
34. (Previously Added) An improved cathode substrate according to claim 31, wherein said cap layer has a thickness in the range of 0.1 to 0.5 microns.
35. (Previously Added) An improved cathode substrate according to claim 31, wherein said cap layer is selected from the group consisting of silicon dioxide, silicon nitride, silicon carbide, and diamond-like carbon.
36. (Previously Added) An improved cathode substrate according to claim 31, wherein said substrate is plastics material.
37. (Previously Added) An improved cathode substrate according to claim 31, wherein said substrate is a non-conductive material.
38. (Previously Added) An improved cathode substrate according to claim 31, wherein said substrate is leached prior to deposition of said cap layer.
39. (Currently Amended) An improved cathode substrate for a field emission display formed by the steps of:
- providing a substrate;
- depositing a cap layer with a light blocking layer within it on the substrate with the light blocking layer extending across an expanse of the cap layer; and
- forming an array of emitter tips on the cap layer with the light blocking layer within it.
40. (Previously Added) An improved cathode substrate according to claim 39, wherein said substrate is a soda-lime glass.
41. (Previously Added) An improved cathode substrate according to claim 39, wherein said cap layer is deposited on said substrate by plasma enhanced, chemical vapor depositions.
42. (Previously Added) An improved cathode substrate according to claim 39, wherein said cap layer has a thickness in the range of 0.1 to 0.5 microns.
43. (Previously Added) An improved cathode substrate according to claim 39, wherein said cap layer is selected from the group consisting of silicon dioxide, silicon nitride, silicon carbide, and diamond-like carbon.

44. (Previously Added) An improved cathode substrate according to claim 39, wherein said substrate is plastics material.
45. (Previously Added) An improved cathode substrate according to claim 39, wherein said substrate is a non-conductive material.
46. (Previously Added) An improved cathode substrate according to claim 39, wherein said substrate is leached prior to deposition of said cap layer.